

REMARKS

Claims 1, 4, 6-18, 20, 23, 25-38, 41, 43-58 and 80-85 are pending in this application. Claims 1, 4, 6-9, 14, 20, 23, 25-28, 33, 38, 41, 43-46, 51 and 83 have been rejected.

The Applicant notes with appreciation that claims 10-13, 15-18, 29-32, 34-37, 47-50, 52-58, 80-82, 84 and 85 have been objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form to include the base claim and any intervening claims.

The Applicant thanks the Examiner for granting the telephone interview of November 15, 2007, and of December 31, 2007. This Response summarizes the substance of those interviews.

The Applicant's amendments submitted herein are consistent with the discussions of the above-mentioned telephone interviews. For example, claim 1 as amended uses language taken from the original description, particularly at paragraph [0009] of the published application, which discusses that base nodes have "RISC-like functionality" whereas complex nodes have "CISC-like functionality". Further, claim 1 as amended specifically recites a tangible result of the method in "executing the generated target code on the target computing system".

As the Applicant argued in previous responses, and discussed in the above-mentioned telephone interviews, Souloglou (WO 00/22521) discloses (on pages 17-21 with reference to Figures 1-5) that each basic block of instructions is broken down to produce "register objects" and "expression objects" arranged in a directed acyclic graph (DAG or "tree") as an intermediate representation of the basic block of program code instructions. However, Souloglou only discusses the equivalent of "base nodes" in the terminology of the present application. Thus, revised claim 1 is novel over Souloglou as least with respect to "complex nodes having complex CISC-like functionality which provides a compact representation of semantics of the decoded instructions". These complex nodes are a significant enhancement over the base nodes discussed in Souloglou. The present invention lead to a much improved method of converting program code into target code executed on a target computer system. In particular, the improved method takes advantage of

selectively using base nodes for some instructions whilst selectively using complex nodes for other instructions.

As discussed in the previous responses, the referenced portions of Souloglou on pages 5, 11 & 13 disclose the building of intermediate representation by referring to an “associated set of register objects” each of which represent a different width of a variable-sized register. Of course, the “variable-sized register” mentioned in Souloglou means a register which is addressable by the program code in a plurality of different widths, as shown particularly in Souloglou at page 7, third paragraph. Even when Souloglou discusses a complex instruction for example at page 13, first paragraph it is clear that Souloglou then requires that such a complex instruction must be decomposed into the base nodes having basic RISC-like functionality in the intermediate representation. Again, we submit that Souloglou does not disclose anything equivalent to the “complex nodes having complex CISC-like functionality” present in the intermediate representation as in the method of revised claim 1.

Corresponding amendments have been made in the recited storage medium of claim 20 and the translator apparatus of claim 38, which are now believed allowable for like reasons to claim 1 discussed above. In view of the amendments to claims 1, 20 and 38, the Applicant believes the rejections under 35 U.S.C. 102(b) as anticipated by Souloglou are no longer proper and should be withdrawn. Likewise, the Applicant believes the rejections of claims 1, 20 and 38, as amended, under 35 U.S.C. §103(a) are no longer proper and should be withdrawn.

The dependent claims have been revised for consistency with the terminology used in the revised claims 1, 20 & 38.

The Applicant respectfully disagrees with the rejections that have been maintained against dependent claims 4, 6-9, 14, 23, 25-28, 33, 41, 43-46, 51 & 83 for the reasons put forward in the previous responses. However, these dependent claims are now allowable not least because they each depend from allowable main claims.

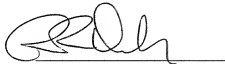
As mentioned above, the Applicant is pleased to note that dependent claims 10-13, 15-18, 29-32, 34-37, 47-50, 52-58, 80-82, 84 & 85 are considered acceptable if rewritten in independent form. However, for the reasons given above and in our previous responses the Applicant does not believe that limiting allowability to these dependent claims is appropriate.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 1801270.00134US1 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: February 1, 2008

A handwritten signature in black ink, appearing to read 'R. Demsher', with a horizontal line extending to the right.

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